Amendments to Claims

- 1. (Canceled)
- 2. (Canceled)
- 3. (Canceled)
- 4. (Currently Amended) The method-device of claim 1–34 wherein said step of passing said combination from vessel to vessel comprises:

passing said combination from vessel to vessel a first predetermined number of passes such that a partially thickened dispersion is obtained;

allowing said partially thickened dispersion to stand for a first predetermined time interval; passing said partially thickened dispersion from vessel to vessel a second predetermined number of passes sufficient to yield a further thickened dispersion;

allowing said further thickened dispersion to stand for a second predetermined time interval, such that a thick, extrudable dispersion is obtained.

- 5. (Original) The method of claim 4 wherein said first predetermined number of passes is about 5-150.
- 6. (Original) The method of claim 4 wherein said second predetermined number of passes is about 5-150.
- 7. (Original) The method of claim 4 wherein said first time interval is about 30-60 minutes.
- 8. (Original) The method of claim 4 wherein said second time interval is at least about 12-72 hours.
- 9. (Canceled)
- 10. (Canceled)

- 11. (Currently Amended) The method device of claim 10-34 wherein the steps of making the implant include further comprising molding said extrudate.
- 12. (Currently Amended) The method device of claim 10-34 wherein the steps of making the implant include further comprising drying said extrudate to provide a dehydrated osteogenic matrix.
- 13. (Currently Amended) The method device of claim 12 wherein the steps of making the implant further include further comprising sterilizing said dehydrated osteogenic matrix.
- 14. (Currently Amended) The method device of claim 13 wherein the steps of making the implant further include further comprising rehydrating said dehydrated osteogenic matrix.
- 15. (Currently Amended) The method device of claim 14 wherein the steps of making the implant further include further comprising mixing a bulking material with said rehydrated matrix to provide a-said shapeable osteogenic implant material.
- 16. (Currently Amended) The <u>method-device</u> of claim 15 wherein said bulking material is particulate demineralized bone matrix.
- 17. (Currently Amended) The method-device of claim 15 wherein the steps of making the implant further include further comprising shaping said osteogenic implant material.
- 18. (Currently Amended) The method-device of claim +34 wherein said thickened dispersion comprises approximately 1-8% (wt./vol.) collagen.
- 19. (Currently Amended) The method device of claim 1–34 wherein said collagen is comprises dehydrated fibrous bovine tendon type I collagen.
- 20. (Currently Amended) The method device of claim + 34 wherein said water containing dilute acid comprises about 10 mM HCl.

- 21. (Currently Amended) The method device of claim 1–34 wherein said osteoinductive substance is chosen from the group consisting of bone growth proteins, bone morphogenetic proteins 1-13, osteogenic protein-1 or 2, FGF-I or -II, TGF-beta, GDF-5,6 7.
- 22. (Currently Amended) The method device of claim 1–34 wherein said combination further includes a biologically active agent other than an-said osteoinductive substance, said biologically active agent being is chosen from the group consisting of growth factors, cartilage inducing factors, angiogenic factors, hormones, antibiotics, antiviral compounds and anticancer compounds.
- 23. (Canceled)
- 24. (Canceled)
- 25. (Canceled)
- 26. (Canceled)
- 27. (Canceled)
- 28. (Canceled)
- 29. (Canceled)
- 30. (Canceled)
- 31. (Canceled)
- 32. (Canceled)
- 33. (Canceled)
- 34. (Currently Amended) An <u>implantable</u> osteogenic <u>spinal device spinal cage produced by the method of claim 33, comprising</u>

a spinal cage; and

an osteogenic implant material received within said cage, wherein said implant material is a paste that is capable of being molded to a desired shape and is made by:

combining purified collagen, an osteoinductive substance, and water containing dilute acid in a dispersing assembly comprising two vessels and a reduced diameter portion, said vessels being in mutual fluid communication by way of said reduced diameter portion;

forcing said combination from vessel to vessel through said reduced diameter portion a predetermined number of times sufficient to disperse said collagen and osteoinductive substance in said water, such that said collagen is at least partially hydrated and a dispersion is obtained;

allowing said dispersion to stand for a predetermined time interval to produce a thickened dispersion; and

extruding said dispersion to provide an extrudate that is capable of being molded to a desired shape.

- 35. (Currently Amended) A method of inducing osteogenesis in a subject in need thereof comprising implanting in said subject at a site where osteogenesis is desired a device according to claim 30 34.
- 36. (Canceled)
- 37. (Previously presented) A method of inducing osteogenesis in the disk space between two adjacent vertebral bodies in the spine of a patient, said method comprising implanting in said disk space an osteogenic spinal cage according to claim 34.
- 38. (Canceled)
- 39. (Canceled)
- 40. (Canceled)
- 41. (Canceled)
- 42. (Canceled)
- 43. (Canceled)
- 44. (Canceled)
- 45. (Canceled)
- 46. (Canceled)
- 47. (Canceled)
- 48. (Canceled)
- 49. (Canceled)

- 50. (Canceled)
- 51. (Canceled)
- 52. (Canceled)
- 53. (Canceled)
- 54. (Canceled)